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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/155,398	02/02/1999	CHOONG SENG BOON	1489/P158730	8585

7590

09/05/2002

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EXAMINER

LEE, Y YOUNG

ART UNIT

PAPER NUMBER

2613

DATE MAILED: 09/05/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/155,398

Applicant(s)

Choong Seng Boon

Examiner

Y. Lee

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2613



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Jul 30, 2002
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 35-38 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 35-38 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on Jul 30, 2002 is/are a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☒ All b) ☐ Some* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
*See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892) 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948) 5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s). _____ 6) ☐ Other:

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DETAILED ACTION

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 35-38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Murakami et al (5,274,442) in view of Lee (5,990,956).

Murakami et al, in Figures 5-7, 12, 14-20, and 23, discloses an adaptive blocking image signal coding system with program operable to make a computer perform substantially the same image coding and decoding method as specified in claims 35-38 of the present invention, in which motion compensation predictive coding (Fig. 14) is performed to a digital image signal 201 forming an image space including an image having an arbitrary shape and containing significant pixels (i.e. object) and insignificant pixels (i.e. background), the image coding and decoding

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method comprising coding difference information 23 between the digital image signal 201 and a corresponding predictive image signal 210 corresponding thereto; generating the predictive image signal 210 in accordance with motion compensation processing 300 performed to the digital image signal 201; and dividing a predictive image space formed by the predictive image signal (Fig. 6) into a first small image space (i.e. even field) comprising only pixels on odd-numbered pixel rows 29 in the predictive image space and a second small image space (i.e. odd field) comprising only pixels on even-numbered pixel rows 28 in the predictive image space.

It is noted Murakami et al differs from the present invention in that it fails to disclose any padding process as specified in claims 35-38. Lee however, in Figure 2, teaches the concept of such well known padding process (i.e. substitute pixels) in which values of insignificant pixels (i.e. background) are replaced with padding pixel values generated on a basis of the significant pixel values (i.e. object); wherein the padding process comprises generating first padding pixel values from values of significant pixels in the first small image space (i.e. first image block) and replacing values of insignificant pixels in the first small image space with the first padding pixel values; and generating second padding pixel values from values of significant pixels in the second small image space (i.e. second image block) and replacing values of insignificant pixels in the second small image space with the second padding pixel values.

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both the references of Murakami et al and Lee before him/her, to exploit the common pixel padding technique as taught in Lee in the image coding and decoding

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method of Murakami et al in order to compensate discontinuities between object pixels located on a same row or column of an object region in an input video signal.

Response to Arguments

4. Applicant's arguments filed 7/30/02 have been fully considered but they are not persuasive.

In response to applicant's arguments on page 8 of the Remarks against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986). Regarding applicant's argument that neither Murakami et al nor Lee discloses the means to divide the multiplicity of image blocks into smaller image spaces, it was clearly stated in the previous office action that Murakami et al discloses all these means in Figure 6. It is true that Lee does not disclose any pre-padding processing of the signal as that claimed by the Applicant. However, examiner does not rely on Lee to teach such capabilities because they are already disclosed in Murakami et al. Lee merely provides the motivation that it would have been obvious to one of ordinary skill in the art at the time the invention was made, having both references of Murakami et al and Lee before him/her, to modify the coding and decoding system of Murakami et al to be upgraded as a motion compensating apparatus by simply utilizing the significant pixel values to substitute for the insignificant pixel values to include the same padding means as specified in claims 35-38. With an upgraded encoding and decoding system, one of ordinary skill in the art

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would have had no difficulty in applying subsequent padding processing such as storing, retrieving, and replacing the insignificant pixels from the memory means (28, 29), as illustrated in Figure 14 of Murakami et al, since pixel padding is a necessary and well known techniques for many encoding and decoding systems.

Conclusion

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. **Any response to this final action should be mailed to:**

Box AF

Commissioner of Patents and Trademarks

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Washington, D.C. 20231

or faxed to:

(703) 872-9314, (for formal communications; please mark "EXPEDITED
PROCEDURE")

(for informal or draft communications, please label

"PROPOSED" or "DRAFT")

Or:

Hand-delivered responses should be brought to Crystal Park II, 2121 Crystal Drive,
Arlington, VA., Sixth Floor (Receptionist).

7. Any inquiry concerning this communication or earlier communications from the examiner
should be directed to Y. Lee whose telephone number is (703) 308-7584.


Y. LEE
PRIMARY EXAMINER

Y. Lee/yl
August 30, 2002